

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Kenji KATO

Serial No.:

Filed: January 23, 2002

For: FUEL CELL APPARATUS AND METHOD OF CONTROLLING
FUEL CELL APPARATUS

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the captioned application as follows:

IN THE CLAIMS:

Please rewrite claims 4-12 as follows:

4. (Amended) A fuel cell apparatus according to claim 1, wherein said load is a drive control unit for a drive motor which drives the vehicle.

5. (Amended) A fuel cell apparatus according to claim 1, wherein said fuel cell outputs electricity in such a manner that output voltage does not become lower than the lowest generatable voltage, output current does not exceed the maximum generatable current, and output

power does not exceed the maximum output power.

6. (Amended) A fuel cell apparatus according to claim 1, wherein said electricity accumulator outputs electricity when the electric power that said load requires exceeds the maximum output power of said fuel cell.

7. (Amended) A fuel cell apparatus according to claim 1, wherein said electricity accumulator outputs electricity when output voltage of said fuel cell becomes lower than the lowest generatable voltage, when output current of said fuel cell exceeds the maximum generatable current, or when output power of said fuel cell exceeds the maximum output power.

8. (Amended) A fuel cell apparatus according to claim 1, wherein fuel gas is supplied from a fuel storage unit to said fuel cell at constant pressure.

9. (Amended) A fuel cell apparatus according to claim 1, wherein said fuel cell apparatus further comprises a fuel supply apparatus for supply fuel gas to said fuel cell, said fuel supply apparatus comprising a fuel storage unit, a supply line extending from said fuel storage unit to said fuel cell, and a valve disposed in said line, wherein said valve is operated in such a manner that the fuel gas is supplied to said fuel cell at constant pressure.

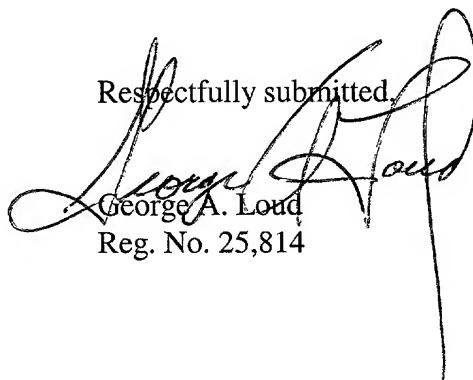
10. (Amended) A fuel cell apparatus according to claim 8, wherein the fuel gas is supplied in such a manner that the pressure of the fuel gas becomes constant within grooves of fuel

electrodes of said fuel cell.

11. (Amended) A fuel cell apparatus according to claim 8, wherein said line includes a fuel supply line and a fuel discharge line; a fuel supply solenoid valve is disposed in said fuel supply line; and a fuel discharge solenoid valve is disposed in said fuel discharge line, wherein said fuel supply solenoid valve and said fuel discharge solenoid valve are turned on and off in order to regulate the pressure of the fuel gas.

12. (Amended) A fuel cell apparatus according to claim 8, wherein a fuel pressure regulation valve is disposed in said line and is operated in order to regulate the pressure of the fuel gas.

Respectfully submitted,


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4. (Amended) A fuel cell apparatus according to claim 1 [any one of claims 1 to 3], wherein said load is a drive control unit for a drive motor which drives the vehicle.

5. (Amended) A fuel cell apparatus according to claim 1 [any one of claims 1 to 4], wherein said fuel cell outputs electricity in such a manner that output voltage does not become lower than the lowest generatable voltage, output current does not exceed the maximum generatable current, and output power does not exceed the maximum output power.

6. (Amended) A fuel cell apparatus according to claim 1 [any one of claims 1 to 5], wherein said electricity accumulator outputs electricity when the electric power that said load requires exceeds the maximum output power of said fuel cell.

7. (Amended) A fuel cell apparatus according to claim 1 [any one of claims 1 to 5], wherein said electricity accumulator outputs electricity when output voltage of said fuel cell becomes lower than the lowest generatable voltage, when output current of said fuel cell exceeds the maximum generatable current, or when output power of said fuel cell exceeds the maximum output power.

8. (Amended) A fuel cell apparatus according to claim 1 [any one of claims 1 to 7], wherein fuel gas is supplied from a fuel storage unit to said fuel cell at constant pressure.

9. (Amended) A fuel cell apparatus according to claim 1 [any one of claims 1 to 7], wherein

said fuel cell apparatus further comprises a fuel supply apparatus for supply fuel gas to said fuel cell, said fuel supply apparatus comprising a fuel storage unit, a supply line extending from said fuel storage unit to said fuel cell, and a valve disposed in said line, wherein said valve is operated in such a manner that the fuel gas is supplied to said fuel cell at constant pressure.

10. (Amended) A fuel cell apparatus according to claim 8 [or 9], wherein the fuel gas is supplied in such a manner that the pressure of the fuel gas becomes constant within grooves of fuel electrodes of said fuel cell.

11. (Amended) A fuel cell apparatus according to claim 8 [any one of claims 8 to 10], wherein said line includes a fuel supply line and a fuel discharge line; a fuel supply solenoid valve is disposed in said fuel supply line; and a fuel discharge solenoid valve is disposed in said fuel discharge line, wherein said fuel supply solenoid valve and said fuel discharge solenoid valve are turned on and off in order to regulate the pressure of the fuel gas.

12. (Amended) A fuel cell apparatus according to claim 8 [any one of claims 8 to 10], wherein a fuel pressure regulation valve is disposed in said line and is operated in order to regulate the pressure of the fuel gas.

